described in detail in Appendix B. The recommended improvements are also inventoried in Appendix C.

For the period from 1997 to 2004, there were 12 crashes reported in Transylvania County that involved bicycles. Of these crashes, 5 occurred on city-maintained streets, 3 occurred on US routes, 2 occurred on state-maintained secondary roads, 1 occurred on an NC route, and 1 occurred on private property.

The recommended bicycle map includes several improvements needed to provide adequate, safe, and desirable facilities for use by bicyclists. These recommendations were developed based on a needs assessment using the Federal Highway Administration's Bicycle Compatibility Index (BCI), the goals and objectives of the study area, comments received from the public, and the known environmental limitations of the study area. All roads that carry a signed or mapped state or county bicycle route (as shown on the *Transylvania County Bicycle Map* (1998)) are assumed to be in need of on-road bicycle improvements unless directly adjacent to an existing or proposed multi-use path. Several other roadways that were noted by local officials and citizens as popular bicycling routes are also shown to be in need of on-road improvements. The multi-use paths shown on the recommended CTP bicycle map come directly from the recently-adopted *Brevard Comprehensive Pedestrian Plan* (2006).

The BCI is a tool that uses information about roadway characteristics and vehicle traffic to determine a letter score describing the compatibility of the roadway with bicycle traffic. Scores range from A (meaning that a roadway is very well-suited to use by bicyclists) to F (meaning that a roadway is very poorly-suited to use by bicyclists). For this analysis, scores of A, B, and C were considered to denote roadways that serve bicycle travel reasonably well, and should have a low priority for on-road bicycle facility improvements. A score of D was considered to denote roadways that serve bicycle travel adequately, but could serve bicyclists better, and should have a medium priority for on-road bicycle facility improvements. Scores of E and F were considered to denote roadways that do not adequately serve bicycle travel, and should have a high priority for on-road bicycle facility improvements. The BCI scores for each roadway with bicycle recommendations are provided below and inventoried in Appendix C.

It should be noted that the recommended improvements to on-road bicycle facilities can include a wide array of potential solutions. These improvements could range from minor projects (such as installing "Share the Road" signs or adding some extra pavement in blind curves) to major improvements (such as constructing bicycle lanes or wide shoulders). An improvement could involve the creation of a designated space for bicycles (such as a bicycle lane), but it could also involve a measure that increases driver awareness of bicyclists. In the recommendations outlined below, it is assumed that major improvements are more applicable on facilities denoted as high or medium priority—minor improvements are more likely on facilities denoted as medium or low priority.

### **Recommended On-road Bicycle Projects:**

## Transylvania County Bicycle Route 1

#### Summary of Need

There is a need to improve the facilities along Transylvania County Bicycle Route 1 to provide a safer bicycle facility.

#### Summary of Purpose

Improving the facilities along this bicycle route should enable the roadways to accommodate automobiles and bicycles, while providing a safer facility for bicyclists.

## • Roadway Conditions

# **Existing Characteristics**

Bicycle Route 1 begins at the intersection of US 178 and Main Street in downtown Rosman, where it intersects with Bicycle Routes 5 and 6. From this point, the route follows US 178 south to East Fork Road, where Bicycle Route 1 intersects with the